Treatment of hepatitis C virus infection in patients of northern India

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Abstract:

BACKGROUND AND AIM: The purpose of the present study was to evaluate the therapeutic response of north Indian patients with chronic hepatitis C (CH-C) to two different treatment regimens of interferon and ribavirin. METHODS: Consecutive patients with a diagnosis of CH-C attending the Liver Clinic at the All India Institute of Medical Sciences, New Delhi between April 1999 and April 2002 were included in the study. A competitive reverse transcription-polymerase chain reaction (RT-PCR) method developed in the authors' laboratory was used for quantification of hepatitis C virus (HCV)-RNA. Genotyping of HCV was also determined. The clinical, biochemical, virological and histological parameters were used to assess the therapeutic response among a clinical cohort of patients with chronic hepatitis C. They were treated with two different protocols (interferon [IFN]-alpha-2b, 3 million units daily and ribavirin 10.6 mg/kg daily in two divided doses for 6 months or IFN-alpha-2b, 3 million units thrice weekly and ribavirin 10.6 mg/kg daily for 6 months). RESULTS: Sixty-five patients with CH-C were included in the study. Blood transfusion (n = 28, 43%) and community-acquired (n = 23, 35%) HCV infections were the commonest. The mean HCV load was high (24.14 +/- 12.5 x 10(8) copies/mL). Genotype 2 and 3 were prevalent in 80% (41/51) of the patients. Forty-five patients received 3 million units of IFN thrice weekly and 20 received the same dose daily. All received the same dose of ribavirin. A sustained virological response (SVR) of 95% (19/20) was achieved among patients receiving daily IFN, whereas 64.4% (29/45) of those who received IFN thrice weekly had SVR. The virological relapse was significantly lower among patients who received daily IFN than in those treated with thrice weekly IFN (n = 1/20, 5% vs 10/39, 25.6%; P = 0.015). The proportion of patients receiving daily IFN among those achieving SVR (19/48, 40%) was significantly higher than the proportion of patients receiving similar therapy among patients without SVR (1/17, 6%; P = 0.02). CONCLUSIONS: Transfusion and community-acquired HCV infection were the major causes of CH-C. Genotype 2 and 3 HCV were most prevalent among these patients. Despite high viral load, these patients responded well to a combination of daily IFN-alpha-2b and ribavirin.